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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/808,536	03/25/2004	Masahiko Kurauchi	US-169	5925

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CERMAK & KENEALY LLP  
ACS LLC  
515 EAST BRADDOCK ROAD  
SUITE B  
ALEXANDRIA, VA 22314

EXAMINER

OLSON, ERIC

ART UNIT PAPER NUMBER

1623

DATE MAILED: 07/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/606,536	<b>Applicant(s)</b> KURAUCHI ET AL.	
	<b>Examiner</b> Eric S. Olson	<b>Art Unit</b> 1623	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 December 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5,7 and 14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5,7 and 14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>October 22, 2004</u> . | 6) <input type="checkbox"/> Other: _____  |

### **Detailed Action**

This office action is a response to applicant's communication submitted December 20, 2005, wherein claim 7 is amended to depend from an non-canceled claim. This application is a continuation of PCT/JP02/09184, filed September 10, 2002, which claims benefit of foreign application JP 2001-297011, filed 09/27/2001.

Claims 1-5, 7, and 14 are pending in this application.

Claims 1-5, 7, and 14 as amended are examined on the merits herein.

The Examiner of the U.S. Patent application SN 10/808536 has changed. In order to expedite the correlation of papers with the application please direct all future correspondence to the Technology Center 1600, Art Unit 1623, attn: Examiner Olson.

Applicant's arguments submitted December 20, 2005, with respect to the rejection of claims 1, 2, 5 and 7 under 35 USC 103, and of claims 3 and 4 under 35 USC 103 are deemed to be persuasive. Accordingly, rejections made under 35 USC 103 in the previous office action are withdrawn.

The examiner's statement regarding claim 14 at pp. 4-5 in the previous office action is withdrawn in view of new grounds of rejection stated below.

The following are new grounds of rejection:

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 and 5 are rejected under 35 U.S.C. 102(e) as being anticipated by Murayama. (US patent 6143695, reference cited in PTO-1449)

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Murayama discloses a composition comprising inosine which is useful for promoting the growth of plant roots. (column 3, lines 10-18) One embodiment of this composition is an aqueous solution comprising inosine and further comprising a base, which in one embodiment is a basic amino acid such as lysine or arginine. (column 3, lines 55-67) Thus, an inosine-arginine salt is formed in situ in the aqueous solution, thus anticipating instant claims 1 and 5.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-4, 7, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murayama. (US patent 6143695, reference cited in PTO-1449) Murayama discloses a composition comprising inosine which is useful for promoting the growth of plant roots. (column 3, lines 10-18) One embodiment of this composition is an aqueous solution comprising inosine and further comprising a base, which in one embodiment is **a basic amino acid such as lysine or arginine.** (column 3, lines 55-67) Another embodiment is a powder or granular preparation. (column 3, lines 60-61) The purpose of the base is to produce an alkaline solution for the purpose of solubilization and preservation of the inosine component. Murayama does not explicitly disclose a composition comprising an equimolar amount of inosine and a arginine as a base, said composition when prepared as a solid, or a method of making such a composition by dissolving both inosine and arginine in water, then drying the dissolution product.

It would have been obvious to one of ordinary skill in the art at the time of the invention to prepare the composition of Murayama using equimolar amounts of inosine and arginine. It would also have been obvious to one of ordinary skill in the art to prepare this composition by the method described in instant claims 3, 4, and 14, by dissolving the two components in water, adding ethanol, and drying the resulting

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product to produce a solid composition. One of ordinary skill in the art would have been motivated to prepare this composition in an equimolar ratio because it is recognized in the art to use the minimal amount of base needed to deprotonate and solubilize the inosine. One of ordinary skill in the art would have been motivated to prepare the composition as a solid because Murayama discloses that the inosine composition may be prepared as a powder or granular preparation. One of ordinary skill in the art would have reasonably expected success in making these modifications because neutralizing an acid with an equimolar amount of a base and recovering the composition as a solid by the method described are routine procedures that are well within the ability of one of ordinary skill in the art.

Thus the invention taken as a whole is *prima facie* obvious.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to

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be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-5, 7, and 14 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 13 of U.S. Patent No. 6143695. (Reference cited in PTO-892, herein referred to as Murayama) Although the conflicting claims are not identical, they are not patentably distinct from each other because the compositions and methods of the claimed invention are associated with the method of claim 13 of Murayama in such a way as to be obvious components of the process of practicing said method.

Claim 13 of Murayama is drawn to a method of promoting root growth in a plant comprising applying inosine to a plant as an alkaline aqueous solution comprising inosine and a basic amino acid which is either lysine or arginine. Claim 13 of Murayama does not explicitly disclose a solid composition comprising an equimolar amount of inosine and arginine, or a method of making such a composition by dissolving both inosine and arginine in water, then drying the dissolution product.

It would have been obvious to one of ordinary skill in the art at the time of the invention to prepare the composition of Murayama using equimolar amounts of inosine and arginine. It would also have been obvious to one of ordinary skill in the art to prepare this composition by the method described in instant claims 3, 4, and 14, by dissolving the two components in water, adding ethanol, and drying the resulting product to produce a solid composition. One of ordinary skill in the art would have been

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motivated to prepare this composition in an equimolar ratio in order to use the minimal amount of base needed to deprotonate and solubilize the inosine. One of ordinary skill in the art would have been motivated to prepare the composition as a solid in order to prepare a solid composition which may easily be converted into the liquid composition used in claim 13 of Murayama without separately measuring out two different ingredients. One of ordinary skill in the art would have reasonably expected success in making these modifications because neutralizing an acid with an equimolar amount of a base and recovering the composition as a solid by the method described are routine procedures that are well within the ability of one of ordinary skill in the art.

### **Summary**

No claims are allowed in this application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric S. Olson whose telephone number is 571-272-9051. The examiner can normally be reached on Monday-Friday, 8:30-5:00.

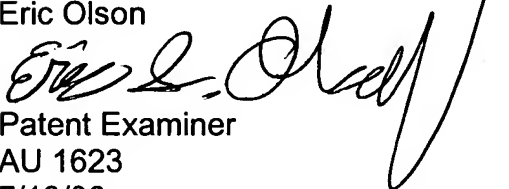
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shaojia Anna Jiang can be reached on (571)272-0627. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Eric Olson



Patent Examiner  
AU 1623  
7/13/06

Anna Jiang



Supervisory Patent Examiner  
AU 1623